Rock Island Arsenal
H-K Connection
(Building 67)
Rodman Avenue and Fourth Street
Rock Island
Rock Island County
Illinois

HAER No. IL-20-R

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

ROCK ISLAND ARSENAL
H-K CONNECTION
(Building 67)
HAER No. IL-20R

Location: Rodman Avenue and Fourth Street,
Rock Island Arsenal,
Rock Island,
Rock Island County, Illinois
UTM: 15.705050.4599040
Quad: Davenport East

Date of Construction: 1917-1918

Present Owner and Occupant: U.S. Army

Present Use: Administrative offices

Significance: Although Rock Island Arsenal was designated an ordnance manufacturing installation during the Civil War, it was not until World War I that all of the stone Greek Revival shops on Rodman Avenue were fully outfitted with production machinery. To facilitate material handling between the shops, the arsenal command in 1917-1918 authorized the construction of four connecting links that matched the architectural detailing of the older buildings. The H-K Connection joined Shops H and K (see HAER Nos. IL-20D, IL-20E). Part of the Rock Island Arsenal National Register Historic District, the building embodied an equal concern for utilitarian and aesthetic considerations that became increasingly rare during subsequent wartime construction programs.

Historian: Jeffrey A. Hess, February 1985

Architectural Historian: David Arbogast, February 1985

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: According to the arsenal's official Completion Report for World-War-I construction, the "H-K Connection [was] started 10-24-17, completed 5-24-18" (p. 3).

2. Architect: Stone and Webster Company of Boston (Completion Report, p. 3).

3. Original and subsequent owners: U.S. Army.

4. Builder, contractor, supplier: Stone and Webster Company served as general contractor (Completion Report, p. 3). Much of the stone came from demolished portions of Shops B and D (Interview with Boully).

5. Original plans and construction: The Rock Island Arsenal Engineering Plans and Services Division has microfiche copies of original elevations prepared by Stone and Webster in 1917. The drawing for the south elevation shows a three-story, seven-bay facade connecting original single bays of the pavilions of Shops H and K. The facade's present configuration conforms to the original plan.

   The drawing for the north elevation also shows a three-story, seven-bay facade connecting original single bays of the pavilions of Shops H and K. On the first two stories below an entablature, the bays are defined by pilasters, which frame window spaces a full two stories in height. A 1944 photograph in the picture collection of the Rock Island Arsenal Historical Office documents that the facade was constructed as planned (see HAER Photo No. IL-20R-4). The facade's present configuration conforms to the original construction, except that the original steel sash on the first story has been replaced by concrete block.

6. Alterations and additions: At an undetermined date, the original slate roofing was removed. In 1947, metal roofing was installed. The Rock Island Arsenal Engineering Plans and Services Division has a photograph documenting this alteration. It is captioned, "228-16881 / October 6, 1947 / Shops H, H-K Annex, and K, Buildings No. 66, 67, 68 / Looking southeast / Installation of Aluminum Roof, Goodwin System, Overly Mfg. Co., Fabricators; Holmquist & Co., Roofers."

About 1979, the steel sash in the first story of the north facade was replaced by concrete block (Interview with Bouilly).

B. Historical Context:

In 1917, the arsenal command authorized the construction of connecting links between four pairs of nineteenth-century manufacturing shops on Rodman Avenue. Designed and built by Stone and Webster Company of Boston, the four new buildings displayed the same stone, Greek Revival architecture of the older structures (see also HAER Nos. IL-20Q, IL-20S, IL-20T). Completed in 1918, Building H-K joined Shops H and K. Originally used for storage and shop space, the building has been designated as "Building 67" and devoted to office space at least since World War II (see HAER Photo No. IL-20R-5; for additional documentation, see HAER No. IL-20).

Prepared by: Jeffrey A. Hess
MacDonald and Mack Partnership
February 1985

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The building is a late Greek Revival style, rectangular, limestone structure with elevations salvaged from the adjacent pavilions of Buildings 66 and 68. As a result, its exterior detailing matches those buldings, although its interior reflects its later construciton dtae. It is two-and-one-half stories tall with a full basement and a gabled roof sheltering an attic. Serving as one of four similar connecting links for the ten stone shops, it effectively recedes into the background of its more illustrious neighbors.

2. Condition of fabric: The building is well-maintained and is in good condition.

B. Description of Exterior:

1. Overall dimensions: The rectangular building measures 90' (7 bays on its north an south elevations) x 55'. It is two-and-one-half stories tall with a full basement and attic.

2. Foundations: Poured, reinforced concrete foundations carry a dressed ashlar limestone water table.

3. Walls: The south elevation (HAER Photo No. IL-20R-1)is reinforced concrete with rock-faced ashlar limestone veneer salvaged from the

adjoining pavilions of Buildings 66 and 68. The north elevation is painted concrete block. Colossal rock-faced ashlar limestone pilasters (HAER Photo No. IL-20R-1) rising from the water table to the entablature divide both elevations into a regular bay system. The dressed limestone entablature (HAER Photo No. IL-20R-1) carries a projecting dressed limestone cornice.

4. Structural systems: The bearing walls are reinforced concrete on the south, concrete block on the north, and brick on the east and west. The basement, first, and second floors contain reinforced concrete piers 20' on-center. The attic contains steel H-columns. First, second, and attic floor systems are poured, reinforced concrete. Tbe roof system is steel beams (HAER Photo No. IL-20R-3).

5. Porches: There is one porch (HAER Photo No. IL-20R-1) centered in the north elevation. It is quite simple, being reinforced concrete with plain steel pipe railings painted black.

6. Light wells: Across the south elevation there is a narrow window well (HAER Photo No. IL-20R-1) with rock-faced ashlar limestone walls to grade and a black steel pipe railing above grade.

7. Openings:

   a. Doorways: The principal doorway (HAER Photo No. IL-20R-1) is located at the porch and contains a rock-faced limestone segmental-arched head with a rock-faced keystone, rock-faced limestone jambs, and a poured concrete sill. The doorway opening contains a pair of modern slab doors each with a single upper glass panel and surrounded by concrete block.

   b. Windows: Typical first- and second-floor south elevation window openings (HAER Photo No. IL-20R-1) contain six-over-six, double-hung, wood sash and have rock-faced limestone jambs, cut limestone sills and flat lintels. These windows match the original sash of Buildings 66 and 68. The north elevation window openings of the second floor contain large, industrial, fixed, 42-light, steel sash with pivoting, six-light segments. The attic window openings (HAER Photo No. IL-20R-1) contain single-light, pivoting, wood sash and have rock-faced jambs and sills and lintels formed by the entablature and frieze and are arranged in pairs. Many of the south attic window openings (HAER Photo No. IL-20R-3) have been filled with plywood. The basement window openings (HAER Photo No. IL-20R-1) typically contain three-over-three, double-hung, wood sash, and have rock-faced limestone jambs, lintels formed by the water table, and flat dressed limestone sill blocks. All wood sash are painted white.

8. Roof:

   a. Shape, covering: The roof (HAER Photo No. IL-20R-1) is a gable form covered with standing seam metal roofing.

   b. Cornice, eaves: The cornice and eaves (HAER Photo No. IL-20R-1) are cut limestone with a Classical profile. The interior metal gutter system is tied to exterior metal leaders which lead to an underground drainage system.

   c. Ventilators: Centered on the ridge of the roof is a large, sheet metal ventilator (HAER Photo No. IL-20R-1).

9. Ancillary buildings: Building 72, a small arms assembly building, is a one-story building with a full basement. It has as its south, east and west walls the north wall of Building 67, the west elevation of the west wing of Building 68, and the east elevation of the east wing of Building 66, respectively. The north wall is concrete block. The roof is a very low gable supported by large steel beams. West of the center of the north elevation, a freight elevator has an overhead door. West of this door is another overhead door and east of it is a pedestrian door. The remainder of the east side of the north wall is filled with industrial steel window sash.

C. Description of Interior:

1. Floor plans: Although the building has two stories with a basement and an attic, it has no stairs or elevators. Access between floors is provided via adjacent stairs in the adjoining pavilions of Buildings 66 and 68.

   a. Basement: The basement is an open plan area.

   b. First floor: The first floor contains a center hall and offices.

   c. Second floor: The second floor has a center hall flanked by a locker room on the north and classrooms on the south.

   d. Attic: The attic is an open plan area.

2. Flooring: Basement flooring is poured concrete with a sealer applied to it. The first story has wood flooring covered with linoleum tile. The second story and attic (HAER Photo No. IL-20R-3) have wood flooring with a varnish coat.

3. Wall and ceiling finishes: Outer basement walls are painted rock-faced ashlar limestone on the south elevation and painted concrete

block on the north elevation. The reinforced concrete piers are painted. The ceiling is exposed and painted reinforced concrete structural beams and slab.

The outer south first-floor wall is painted rock-faced limestone. The outer north wall is painted concrete block. The east and west end walls are painted brick. The concrete piers are painted. Interior partitions are painted, vertical, beaded, tongue-and-groove board with twelve-light, fixed, wood sash and demountable partitions. The ceiling is the painted concrete of the floor system above.

The second-floor south outer wall is painted rock-faced ashlar limestone. The north wall (HAER Photo No. IL-20R-2) is painted concrete block. The east and west end walls are painted brick. Interior partitions are painted, vertical, beaded, tongue-and-groove board (HAER Photo No. IL-20R-2); wire cage; and demountable partitions. The ceiling (HAER Photo No. IL-20R-2) is the painted concrete of the floor system above.

The outer attic walls (HAER Photo No. IL-20R-3) are unpainted rock-faced ashlar limestone. The end walls are unpainted tile (HAER Photo No. IL-20R-3) and unpainted brick. The ceiling (HAER Photo No. IL-20R-3) is unfinished wood roof sbeathing.

4. Openings:

   a. Doorways and doors: All doorways are of relatively recent vintage appropriate to theirrespective partitions.

   b. Windows: There are no window casings. Window openings are formed by the adjacent masonry.

5. Hardware: No known original hardware, other than window sash cords, pulleys, weights, and ornate lifts, is known to survive.

6. Mechanical equipment:

   a. Heating, air conditioning, ventilation: The building is heated by steam radiators (HAER Photo No. IL-20D-2) from a central heating plant (Building 227). There is no air conditioning. Ventilation is provided by opening the window sash.

   b. Lighting: Artificial illumination is by means of fluorescent electrical fixtures (HAER Photo Nos. IL-20R-2 and IL-20R-3) throughout the building, with additional incandescent fixtures in the basement and attic (HAER Photo No. IL-20R-3). No evidence remains of original artificial lighting systems.

D. Site:

General setting and orientation: Connecting Buildings 66 and 68, both small arms assembly buildings, the building is centered between Third Avenue on the west and East Avenue to the east and lies north of Rodman Avenue, the arsenal's principal street. To the north, filling the courtyard between all three buildings, lies Bulding 72, another small arms assembly building, north of which is North Avenue. The relatively level site slopes gently to the north.

Prepared by: David Arbogast
Architectural Conservator
February 1985

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

Microfiche copies of the following drawings are on file at the Rock Island Arsenal Engineering Plans and Services Division:

Stone and Webster, "Cut Stone Details / Building H K / Sheet No. 1 / South Elevation," November 20, 1917, F50577, microfiche R20000366; shows original construction.

Stone and Webster, "Cut Stone Details / Sheet No. 2 / Building H K / North Elevation," November 22, 1917, microfiche R20000376; shows original construction.

B. Early Views:

The picture collection of the Rock Island Arsenal Historical Office has a 1944 photograph documenting the original construction of the north facade. It is captioned "49 / Looking south at rear of 'H-K' Annex, Building #67 / 11 November 1944" (see HAER Photo No. IL-20R-4). The same collection also has a 1943 photograph of the interior showing the building's use as office space. It is captioned "45-7790 February 13, 1943 / Shop H-K Annex, Bldg. #67. Planning Room, Small Arms Dept" (see HAER Photo No. IL-20R-5).

C. Interviews:

Robert Bouilly, Senior Historian, Rock Island Arsenal Historical Office, May 30, 1984; noted the reuse of stone from demolished portions of Shops H and K, and provided approximate date for alteration of north facade.

D. Bibliography:

1. Primary and unpublished sources:

Hess, Jeffrey A., and Mack, Robert C. "Historic Properties Report Rock Island Arsenal, Rock Island, Illinois". Prepared by MacDonald and Mack Partnership, and Building Technology Incorporated for the Historic American Buildings Survey/Historic American Engineering Record, National Park Service, U.S. Department of the Interior, 1985. The report, with accompanying inventory cards, is filed as field records in the Prints and Photographs Division, Library of Congress, under HAER No. IL-20.

Real Property Cards. Rock Island Arsenal Engineering Plans and Services Division. Briefly describes building's structural characteristics and maintenance history.

2. Secondary and published sources:

Completion Report Covering All Construction Projects Accomplished Under Supervision of the Construction Division, U.S. Army at Rock Island Arsenal. N. pl.: n. pub., 1922. Rock Island Arsenal Historical Office. Describes planning and construction of building.

War's Greatest Workshop Rock Island Arsenal. N. pl.: Arsenal Publishing Co. of the Tri-Cities, 1922. Rock Island Arsenal Historical Office. Describes planning and construction of the building.

PART IV. PROJECT INFORMATION

This project was part of a program initiated through a memorandum of agreement between the National Park Service and the U.S. Department of the Army. Stanley J. Fried, Chief, Real Estate Branch of Heaquarters DARCOM, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record, were program directors. Sally Kress Tompkins of HABS/HAER was program manager, and Robie S. Lange of HABS/HAER was project manager. Building Technology Incorporated, Silver Spring, Maryland, under the direction of William A. Brenner, acted as primary contractor, and MacDonald and Mack Partnership, Minneapolis, was a major subcontractor. The project included a survey of historic properties at Rock Island Arsenal, as well as preparation of an historic properties report and HABS/HAER documentation for 38 buildings. The survey, report, and documentation were completed by Jeffrey A. Hess, historian, Minneapolis; Barbara E. Hightower, historian, Minneapolis; David Arbogast, architectural historian, Iowa City, Iowa; and Robert C. Mack,

architect, Minneapolis. The photographs were taken by Robert A. Ryan, J Ceronie, and Bruce A. Harms of Dennett, Muessig, Ryan, and Associates, Ltd., Iowa City, Iowa. Drawings were produced by John Palmer Low, Minneapolis.